

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

**J. Spencer Grant et al.**

Confirmation No. 7395

Application No. 09/815,885

Filed: March 23, 2001

For: **METHOD AND APPARATUS FOR  
CHARACTERIZING AND  
ESTIMATING THE PARAMETERS OF  
HISTOLOGICAL AND  
PHYSIOLOGICAL BIOMETRIC  
MARKERS FOR AUTHENTICATION**

Group Art Unit: 3766

Examiner: Reidel, Jessica L.

Attorney Docket No. 36360/1.13

Date: December 13, 2007

DECLARATION UNDER 37 CFR 1.131

TO THE COMMISSIONER FOR PATENTS:

I, Michael M. Conger, hereby declare that:

1. I prepared and filed the above-identified patent application on behalf of the assignee, Tarian Technologies, LLC. A printout from the United States Patent and Trademark Office (USPTO) showing the initial assignment of the above-referenced application to Tarian Technologies, LLC by the named inventors of the above-referenced application is attached as Exhibit 1 (assignment: 1).

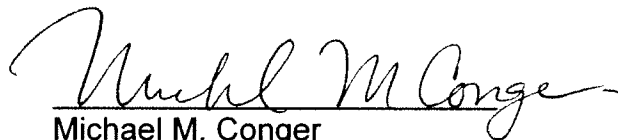
2. I believe that the above-identified patent application was later assigned to Ensign Holdings, LLC. Exhibit 1 shows an assignment to Ensign Holdings, LLC (assignment: 6).

3. On March 21, 2001, I made final revisions to the above-identified application. A redacted copy of a billing memo showing an invoice for my work on March 21, 2001, is attached as Exhibit 2.

4. On March 23, 2001, I finalized the above-identified application and transmittal documents for filing with the USPTO. Exhibit 2 shows an invoice for this work on March 23, 2001.

5. On the same day, March 23, 2001, the above-identified application was filed with the USPTO. Exhibit 2 shows an invoice for this filing on March 23, 2001. In addition, the above-identified application has been assigned a filing date of March 23, 2001, by the USPTO.

6. I declare that those statements made of my own knowledge are true and that all statements made on information or belief are believed to be true. This declaration is being made knowing that willful false statements and the like are punishable by fine or imprisonment, or both (18 U.S.C. § 1001), and may jeopardize the validity of the application or any patent issuing thereon.

  
Michael M. Conger

Date: 17 December 2007



## United States Patent and Trademark Office

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## Patent Assignment Abstract of Title

**NOTE: Results display only for issued patents and published applications.  
For pending or abandoned applications please consult USPTO staff.**

## Total Assignments: 6

Patent #: NONE

Issue Dt:

Application #: 09815885

Filing Dt: 03/23/2001

Publication #: 20070016088

Pub Dt: 01/18/2007

Inventors: J. Spencer Grant, Rick V. Murakami, Clark Hinton, Matthew W. Pettit

Title: Method and apparatus for characterizing and estimating the parameters of histological and physiological biometric markers for authentication

## Assignment: 1

Reel/Frame: 012030/0515

Recorded: 07/30/2001

Pages: 5

Conveyance: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

Assignors: GRANT, J. SPENCER

Exec Dt: 07/15/2001

MURAKAMI, RICK V.

Exec Dt: 07/15/2001

HINTON, CLARK

Exec Dt: 07/15/2001

PETTIT, MATTHEW W.

Exec Dt: 07/15/2001

Assignee: TARIAN LLC3483 AIRPORT ROAD  
OGDEN, UTAH 84405Correspondent: MICHAEL F. KREIGER  
1800 EAGLE GATE TOWER  
60 EAST SOUTH TEMPLE  
SALT LAKE CITY, UT 84111

## Assignment: 2

Reel/Frame: 015656/0027

Recorded: 02/07/2005

Pages: 6

Conveyance: AMENDED DEFAULT JUDGMENT

Assignor: UNION RECOVERY

Exec Dt: 12/08/2004

Assignee: KIRTON & MCCONKIE60 EAST SOUTH TEMPLE  
SUITE 1800  
SALT LAKE CITY, UTAH 84111Correspondent: KIRTON & MCCONKIE  
60 EAST SOUTH TEMPLE  
SUITE 1800  
SALT LAKE CITY, UT 84111

## Assignment: 3

Reel/Frame: 017842/0963

Recorded: 05/09/2006

Pages: 3

Conveyance: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

Assignors: TARIAN TECHNOLOGIES, INC.

Exec Dt: 12/10/2004

TARIAN TECHNOLOGIES, L.L.C.

Exec Dt: 12/10/2004

TARIAN, L.L.C.

Exec Dt: 12/10/2004

**Assignee:** KIRTON & MCCONKIE, P.C.  
60 EAST SOUTH TEMPLE  
SALT LAKE CITY, UTAH 84111

**Correspondent:** JOHN R. THOMPSON  
STOEL RIVES LLP  
ONE UTAH CENTER  
201 SOUTH MAIN STREET, SUITE 1100  
SALT LAKE CITY, UT 84111

**Assignment: 4**

**Reel/Frame:** 015676/0872

**Recorded:** 02/15/2005

**Pages:** 4

**Conveyance:** ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

**Assignor:** KIRTON & MCCONKIE

**Exec Dt:** 02/14/2005

**Assignee:** ENSIGN HOLDINGS, LLC  
235 WEST 100 SOUTH  
SALT LAKE CITY, UTAH 84101

**Correspondent:** KIRTON & MCCONKIE  
60 EAST SOUTH TEMPLE  
SUITE 1800  
SALT LAKE CITY, UT 84111

**Assignment: 5**

**Reel/Frame:** 018709/0309

**Recorded:** 12/21/2006

**Pages:** 4

**Conveyance:** ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

**Assignor:** UNION RECOVERY CORPORATION

**Exec Dt:** 11/07/2006

**Assignee:** KIRTON & MCCONKIE  
60 EAST SOUTH TEMPLE  
1800 EAGLE GATE TOWER  
SALT LAKE CITY, UTAH 84111

**Correspondent:** JOHN R. THOMPSON  
STOEL RIVES LLP  
ONE UTAH CENTER  
201 SOUTH MAIN STREET, SUITE 1100  
SALT LAKE CITY, UT 84111

**Assignment: 6**

**Reel/Frame:** 018707/0536

**Recorded:** 12/21/2006

**Pages:** 4

**Conveyance:** ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

**Assignor:** KIRTON & MCCONKIE, PC

**Exec Dt:** 12/14/2006

**Assignee:** ENSIGN HOLDINGS  
275 EAST SOUTH TEMPLE, SUITE 250  
SALT LAKE CITY, UTAH 84111

**Correspondent:** JOHN R. THOMPSON  
STOEL RIVES LLP  
ONE UTAH CENTER  
201 SOUTH MAIN STREET, SUITE 1100  
SALT LAKE CITY, UT 84111

Search Results as of: 11/30/2007 01:07 PM

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Web interface last modified: April 20, 2007 v.2.0.1

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LAW OFFICES OF  
**KIRTON & McCONKIE**  
A PROFESSIONAL CORPORATION  
1800 EAGLE GATE TOWER  
60 EAST SOUTH TEMPLE  
P.O. BOX 45120  
SALT LAKE CITY, UTAH 84145-0120

TAX ID # 87-0376298

TELEPHONE (801) 328-3600

ATTN: KEVIN K. NELSON  
TARIAN TECHNOLOGIES  
4126 NORTH 930 WEST  
PLEASANT VIEW UT 84414

APRIL 18 2001  
9437-11

PAGE 1

9437-11  
PAT/SOFTWARE METHOD FOR NORMALIZING AND  
SUMMARY

Balance before last month

BALANCE FORWARD

Current Legal Fees

Current Costs Disbursed

TOTAL CURRENT CHARGES (see attached)

BALANCE NOT INCLUDING INTEREST

ACCUMULATED INTEREST DUE

TOTAL BALANCE INCLUDING INTEREST

LAW OFFICES OF  
**KIRTON & McCONKIE**  
A PROFESSIONAL CORPORATION  
1800 EAGLE GATE TOWER  
60 EAST SOUTH TEMPLE  
P.O. BOX 45120  
SALT LAKE CITY, UTAH 84145-0120

TAX ID # 87-0375296

TELEPHONE (801) 328-3600

ATTN: KEVIN K. NELSON  
TARIAN TECHNOLOGIES  
4126 NORTH 980 WEST  
PLEASANT VIEW UT 84414




APRIL 18 2001  
9437-11

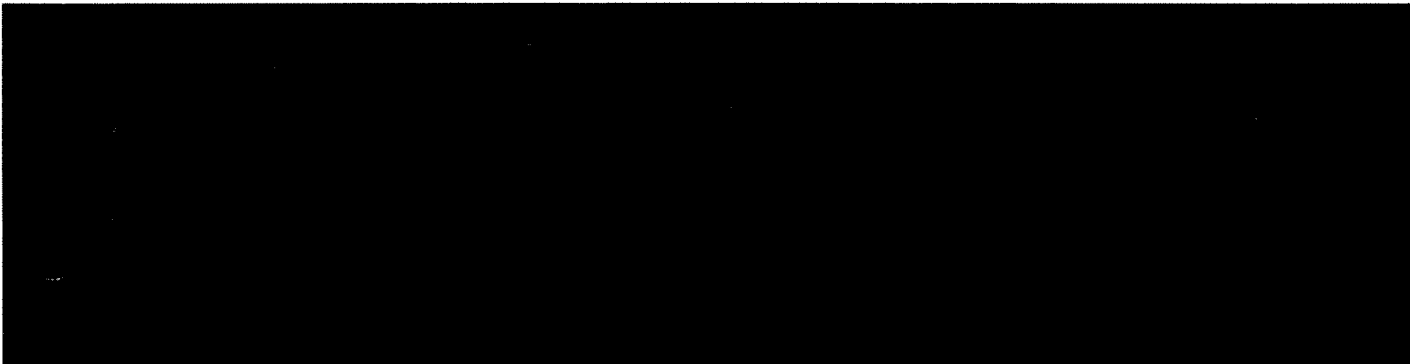
PAGE 2

FOR PROFESSIONAL SERVICES RENDERED

9437-11

PAT/SOFTWARE METHOD FOR NORMALIZING AND  
SERVICES



MAR 21 01 MMC	MAKING FINAL REVISIONS TO PATENT APPLICATIONS BASED ON CLIENT'S REVIEW AND REQUEST FOR CHANGES.	
MAR 23 01 MFK	FINALIZE APPLICATION AND TRANSMITTAL DOCUMENTS AND ATTEND TO FILING IN USPTO	
MAR 23 01 MMC	FINALIZING DOCUMENTS AND APPLICATION FOR FILING	





TOTAL FEES

DISBURSEMENTS

POSTAGE  
PHOTOCOPIES  
MESSENGER SERVICE  
PATENT AND TRADEMARK FEE  
TOTAL DISBURSEMENTS



ALL LEGAL FEES AND COSTS DISBURSED ARE DUE UPON YOUR RECEIPT OF THIS INVOICE. ANY AMOUNTS WHICH ARE NOT PAID WITHIN THIRTY (30) DAYS OF THE DATE OF THIS INVOICE SHALL BEAR INTEREST AT THE RATE OF ONE & ONE-HALF PERCENT (1 1/2%) PER MONTH (18% PER YEAR).



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

**J. Spencer Grant et al.**

Confirmation No. 7395

Application No. 09/815,885

Filed: March 23, 2001

For: **METHOD AND APPARATUS FOR  
CHARACTERIZING AND  
ESTIMATING THE PARAMETERS  
OF HISTOLOGICAL AND  
PHYSIOLOGICAL BIOMETRIC  
MARKERS FOR AUTHENTICATION**

Group Art Unit: 3766

Examiner: Reidel, Jessica L.

Attorney Docket No. 36360/1.13

Date: January 30, 2008

DECLARATION UNDER 37 C.F.R. § 1.131

I, Clark T. Hinton, hereby declare that:

1. I am a named inventor of the above-identified patent application (hereafter "Application"), which was filed on March 23, 2001.
2. I, along with the other named inventors of the Application, conceived and diligently reduced to practice the subject matter of the Application in this country (the United States of America) prior to March 21, 2001.
3. I received a draft of the application and drawings for my review prior to March 21, 2001. A copy of a letter sent by the attorney handling the case, Mr. Michael F. Krieger, is attached as Exhibit 1. As shown in Exhibit 1, Mr. Krieger mailed a draft of the application and associated drawings to Mr. Rick V. Murakami. Mr. Murakami is an inventor of the Application.
4. The letter from Mr. Krieger refers to enclosed drawings. *See* Exhibit 1. I, along with the other named inventors of the Application, developed the referenced drawings

in the United States prior to March 21, 2001. A copy of these drawings is attached as Exhibit 2.

5. I declare that those statements made of my own knowledge are true and that all statements made on information or belief are believed to be true. This declaration is being made knowing that willful false statements and the like are punishable by fine or imprisonment, or both (18 U.S.C. § 1001), and may jeopardize the validity of the application or any patent issuing thereon.

Respectfully submitted,

**Clark T. Hinton**

A handwritten signature in cursive script, reading "Clark T. Hinton", is written over a horizontal line.



MICHAEL F. KRIEGER  
REGISTERED PATENT ATTORNEY

**KIRTON &  
McCONKIE**

A PROFESSIONAL CORPORATION  
ATTORNEYS AT LAW

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SALT LAKE CITY, UTAH 84145-0120

FAX (801) 321-4893  
TELEPHONE (801) 328-3600  
E-MAIL: mkrieger@kmcclaw.com

Mr. Rick V. Murakami  
Tarian, LLC  
3483 Airport Road  
Ogden, Utah 84405

Re: United States Patent Application for  
METHOD AND APPARATUS FOR NORMALIZATION OF HISTOLOGICAL  
AND PHYSIOLOGICAL BIOMETRIC MARKERS FOR AUTHENTICATION  
Our File: 9437.11

Dear Rick:

Enclosed herewith for your review is the original of the above-entitled patent application including drawings with attached Declaration, Power of Attorney and Petition. An original Assignment in favor of Tarian Technologies is also enclosed.

Please review and have Clark and Matthew review the enclosed application in terms of accuracy, completeness and correct use of terminology. If the application is adequate in its present form, please sign and have Clark and Matthew sign the original Declaration, Power of Attorney and Petition at the back of the application and also the original Assignment and return them to me in the enclosed, self-addressed, stamped envelope for filing with the Patent and Trademark Office.

If a few corrections are required, please make those corrections directly on the face of the enclosed patent application and date and initial (in the margin) each correction. Then return the corrected patent application and executed documents to us. If extensive changes are necessary, please make those changes on the face of the application document and return (unsigned) all documents to us. We will then amend the original to reflect the suggestions which you make and finalize the application for your signature before filing the application in the United States Patent and Trademark Office.

Also, would you please have Clark provide his residential address and citizenship where indicated on the Declaration and his residential address on the Assignment.

Mr. Rick. V. Murakami

Page 2

As soon as we have received the requested documents from you, we will lodge this application in the Patent Office with the appropriate transmittal documents and government filing fees.

If you have any questions about the enclosed patent application, please let me know.

Cordially,

KIRTON & McCONKIE



Michael F. Krueger

MFK:mlm

W:\9000\9437\0011\mfrRMurakami122900Ltr.wpd

Enclosures: Application  
Drawings  
Declaration, Power of Attorney and Petition  
Assignment  
Declaration Claiming Small Entity Status  
for a Small Business Concern

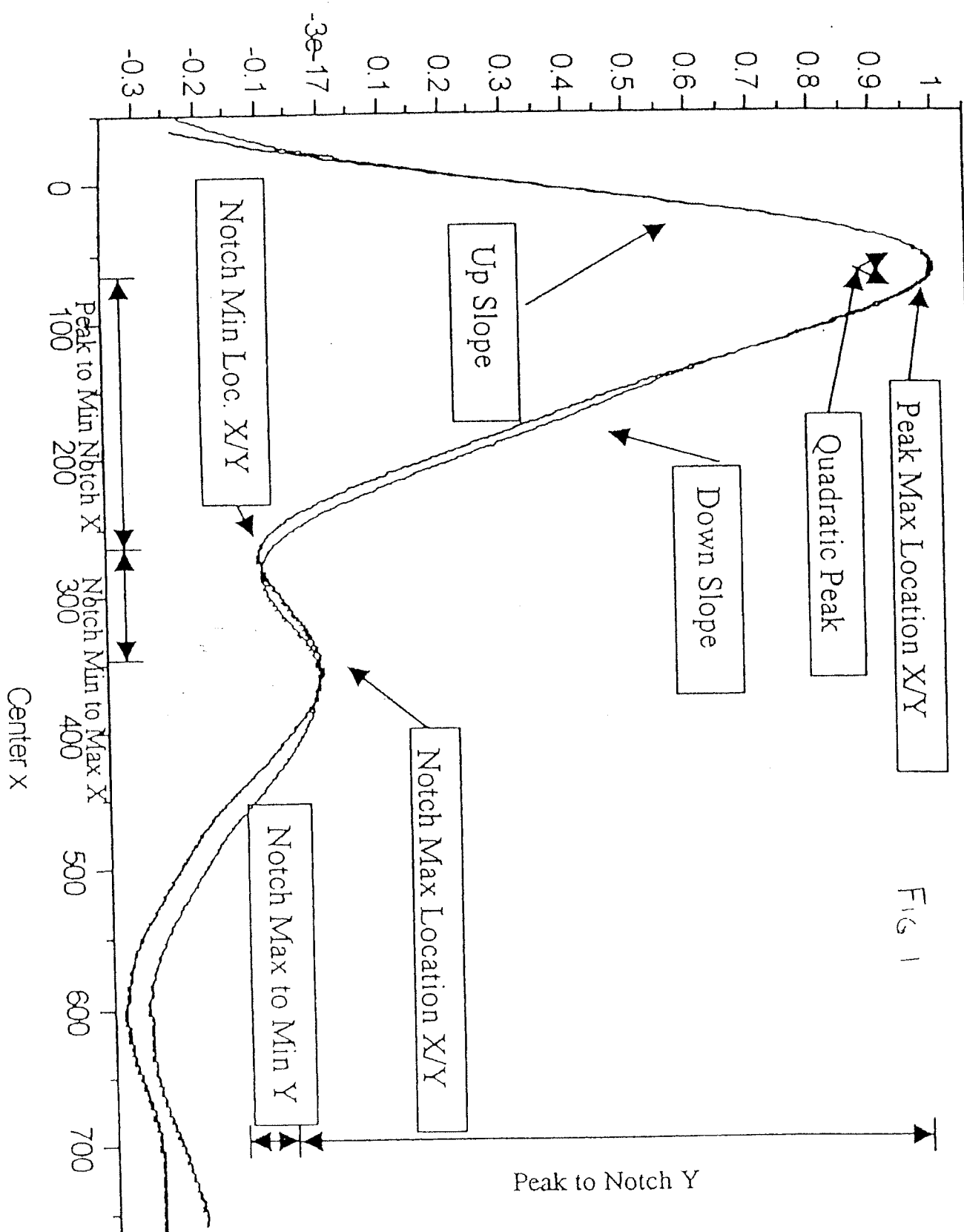


FIG 1

2 515

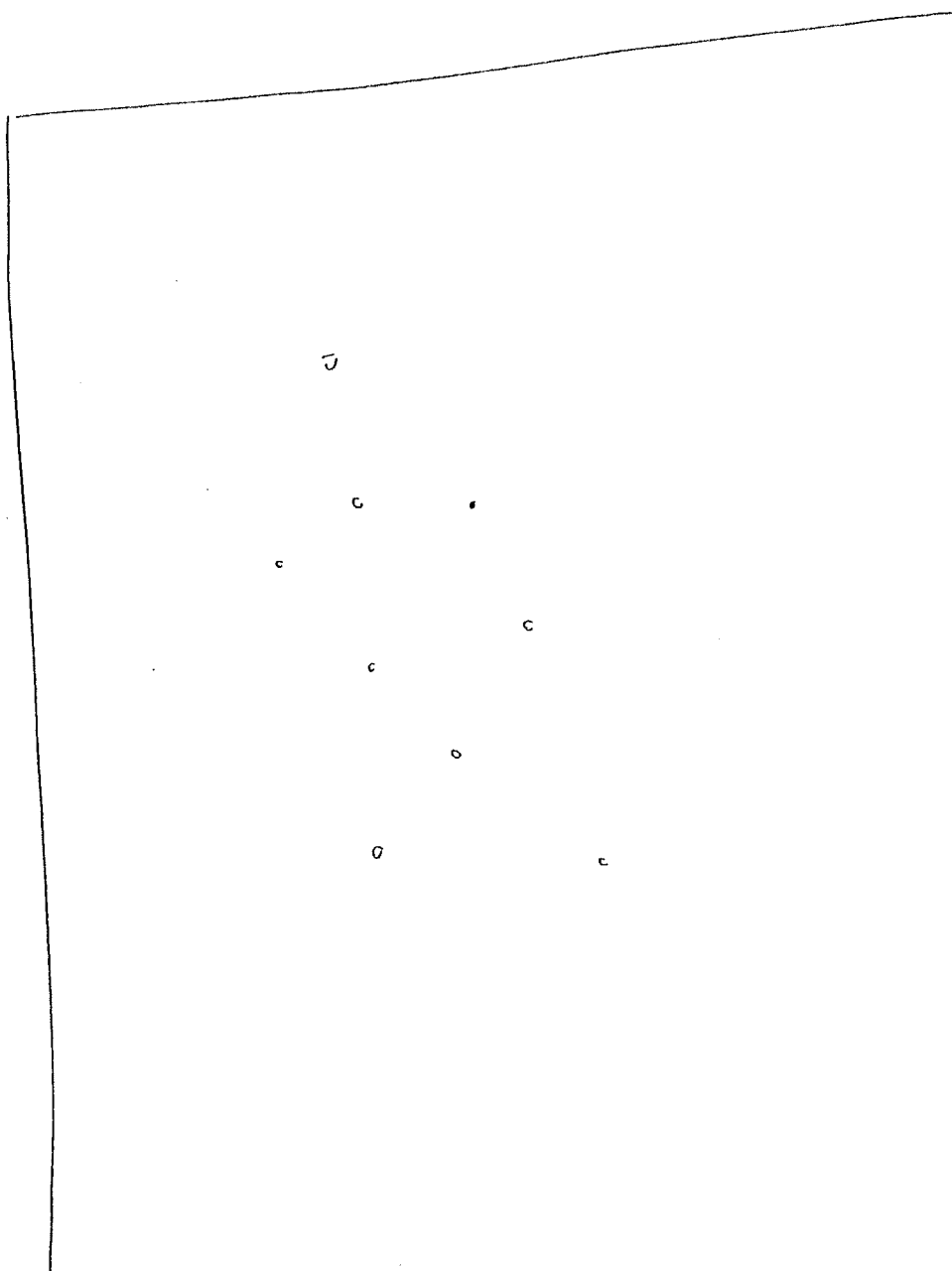


Fig 3



Features of Heartbeat Wave Form
Rate of change (slope) at all locations of the wave form. (There are $n-1$ of these per wave form. $n$ = number of data points)
Shape of Peak associated with the strongest wave form feature
Shape of Peak associated with the dicrotic notch
Shape of Inverted Peak associated with dicrotic notch
Approach angle of Peak associated with the strongest wave form feature
Approach angle of Peak associated with the dicrotic notch
Approach angle of Inverted Peak associated with the strongest wave form feature
Approach angle of Inverted Peak associated with dicrotic notch
Location of Peak associated with the strongest wave form feature
Relative location of Peak associated with the strongest wave form feature
Location of Peak associated with the dicrotic notch
Relative location of Peak associated with the dicrotic notch
Location of Inverted Peak associated with the dicrotic notch
Relative Location of Inverted Peak associated with the dicrotic notch
Magnitude of Peak associated with the strongest wave form feature
Magnitude of Peak associated with the dicrotic notch
Magnitude of Inverted Peak associated with dicrotic notch
Maximum rates of change along any defined segment of the wave form
Minimum rates of change along any defined segment of the wave form
Relative location associated with maximum rates of change along any defined segment of the wave form
Relative location associated with minimum rates of change along any defined segment of the wave form
Magnitude associated with maximum rates of change along a defined segment of the wave form
Magnitude associated with minimum rates of change along any defined segment of the wave form
Frequency of the wave form as determined by any data point

Features of Heartbeat Wave Form
Frequency of wave form as determined by a combination of data points
Trend measures associated with a feature
Trend measures associated with any segment and wave form
Cycles associated with any feature
Cycles associated with any segment of the wave form
Series associated with a feature
Series associated with a segment of the wave form
Variability estimates associated with features
Variability estimates associated with subsegments
Variability estimates associated with defined measures
Linear combination of features, segments, and data on a wave form
Non-linear combinations of features, segments, and data on a wave form

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

**J. Spencer Grant et al.**

Confirmation No. 7395

Application No. 09/815,885

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OF HISTOLOGICAL AND  
PHYSIOLOGICAL BIOMETRIC  
MARKERS FOR AUTHENTICATION**

Group Art Unit: 3766

Examiner: Reidel, Jessica L.

Attorney Docket No. 36360/1.13

Date: January 29, 2008

DECLARATION UNDER 37 C.F.R. § 1.131

I, Matthew W. Pettit, hereby declare that:

1. I am a named inventor of the above-identified patent application (hereafter "Application"), which was filed on March 23, 2001.
2. I, along with the other named inventors of the Application, conceived and diligently reduced to practice the subject matter of the Application in this country (the United States of America) prior to March 21, 2001.
3. I received a draft of the application and drawings for my review prior to March 21, 2001. A copy of a letter sent by the attorney handling the case, Mr. Michael F. Krieger, is attached as Exhibit 1. As shown in Exhibit 1, Mr. Krieger mailed a draft of the application and associated drawings to Mr. Rick V. Murakami. Mr. Murakami is an inventor of the Application.
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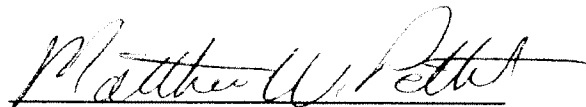


in the United States prior to March 21, 2001. A copy of these drawings is attached as Exhibit 2.

5. I declare that those statements made of my own knowledge are true and that all statements made on information or belief are believed to be true. This declaration is being made knowing that willful false statements and the like are punishable by fine or imprisonment, or both (18 U.S.C. § 1001), and may jeopardize the validity of the application or any patent issuing thereon.

Respectfully submitted,

**Matthew W. Pettit**

A handwritten signature in cursive script, reading "Matthew W. Pettit", written over a horizontal line.

MICHAEL F. KRIEGER  
REGISTERED PATENT ATTORNEY

**KIRTON &  
McCONKIE**

A PROFESSIONAL CORPORATION  
ATTORNEYS AT LAW

1800 EAGLE GATE TOWER  
60 EAST SOUTH TEMPLE  
P.O. BOX 45120  
SALT LAKE CITY, UTAH 84145-0120

FAX (801) 321-4893  
TELEPHONE (801) 328-3600  
E-MAIL: mkrieger@kmcclaw.com

Mr. Rick V. Murakami  
Tarian, LLC  
3483 Airport Road  
Ogden, Utah 84405

Re: United States Patent Application for  
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AND PHYSIOLOGICAL BIOMETRIC MARKERS FOR AUTHENTICATION  
Our File: 9437.11

Dear Rick:

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Mr. Rick V. Murakami

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If you have any questions about the enclosed patent application, please let me know.

Cordially,

KIRTON & McCONKIE

Michael F. Krueger

MFK:mlm

W:\9000\9437\001\1\mfkRMurakami122900Ltr.wpd

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Declaration Claiming Small Entity Status  
for a Small Business Concern

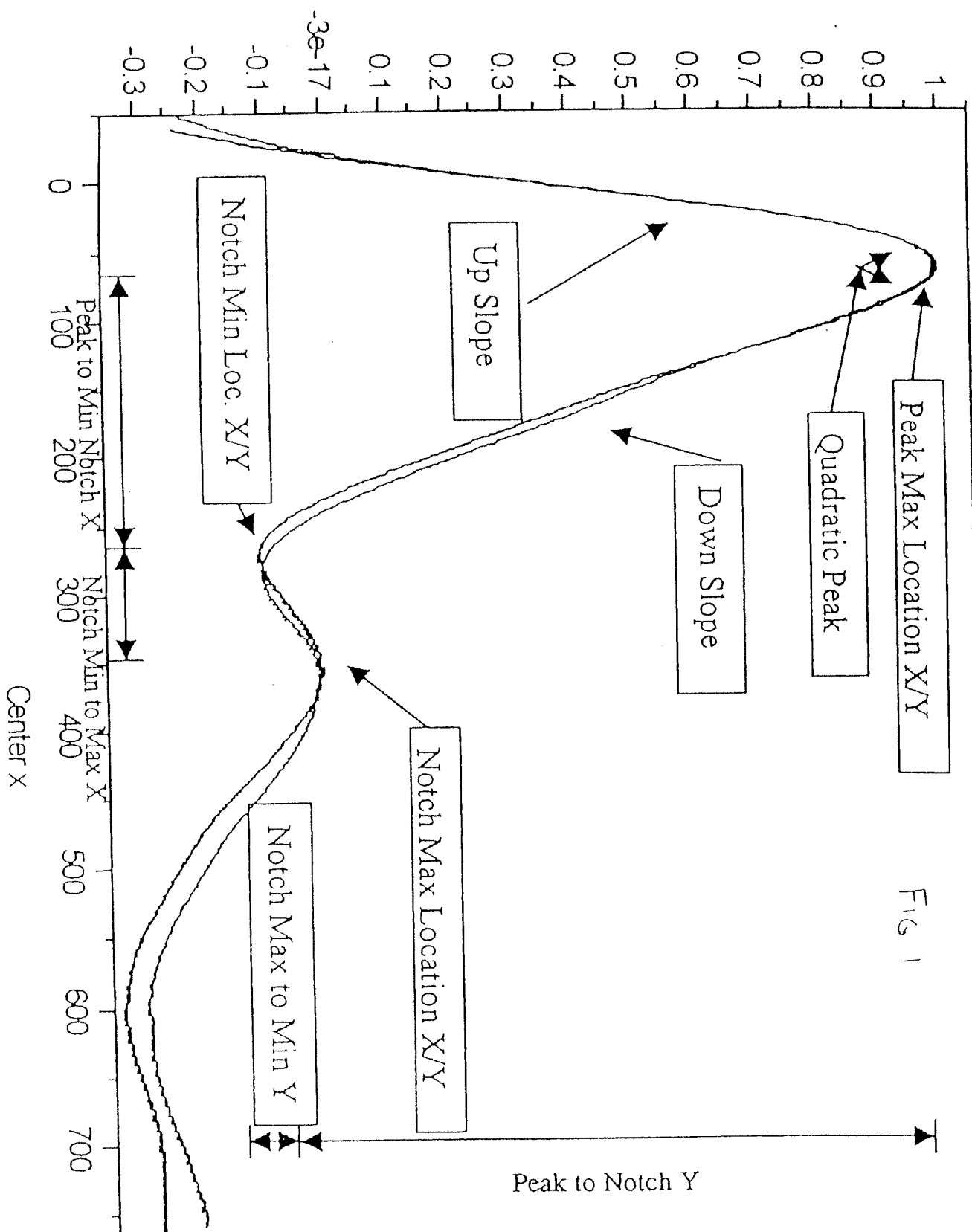


FIG 2

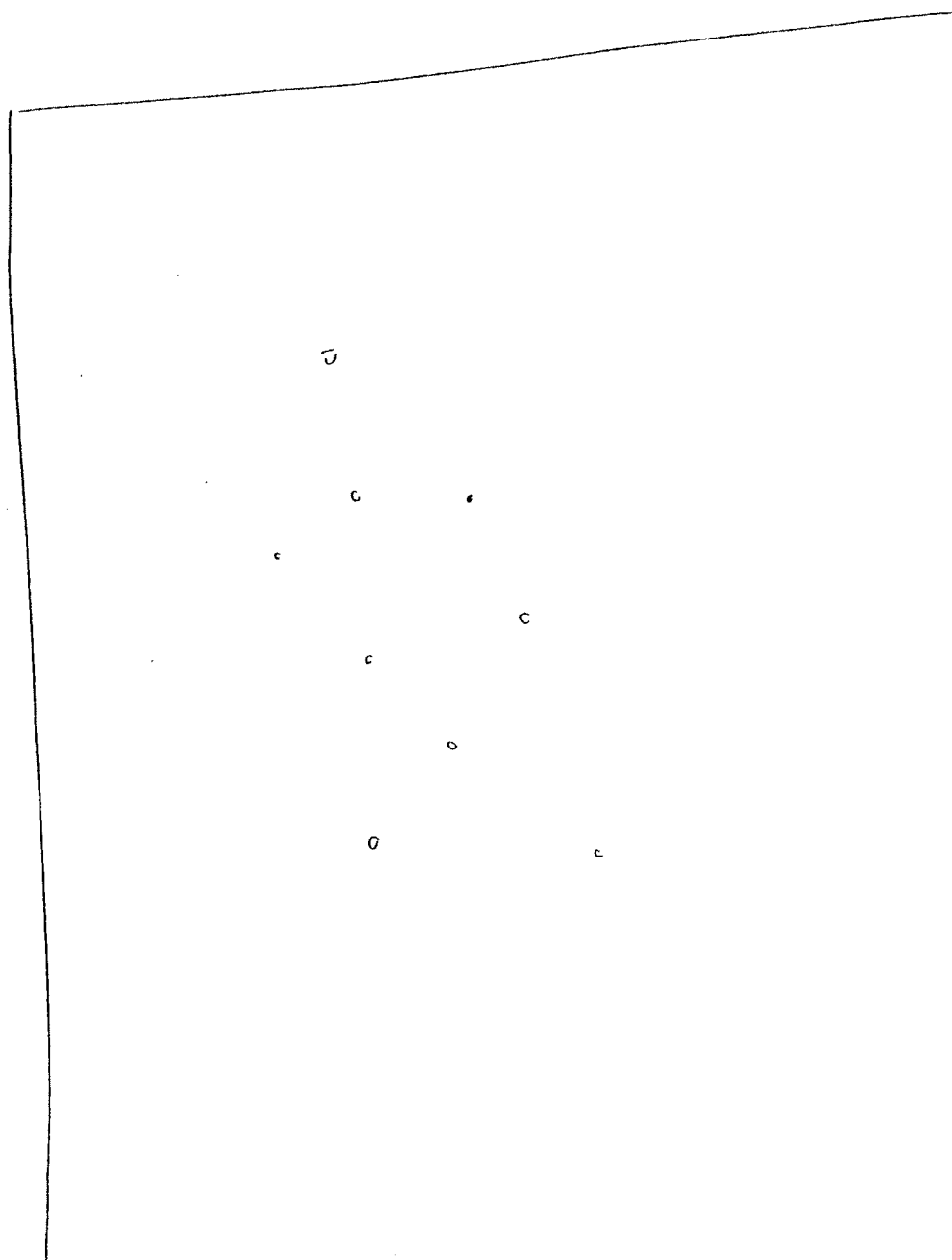


FIG 3

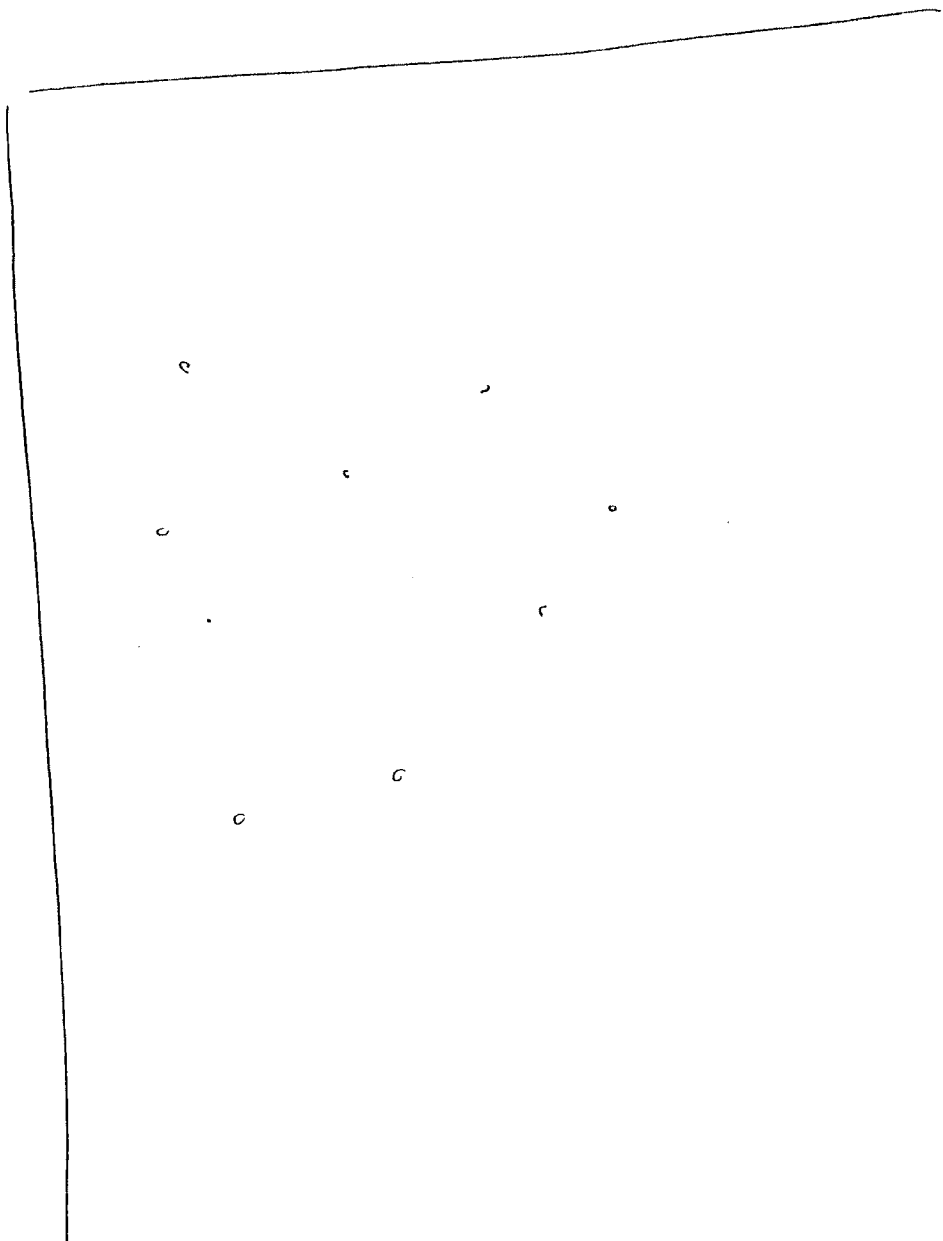


TABLE 14.

Features of Heartbeat Wave Form
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Shape of Peak associated with the strongest wave form feature
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Approach angle of Peak associated with the dicrotic notch
Approach angle of Inverted Peak associated with the strongest wave form feature
Approach angle of Inverted Peak associated with dicrotic notch
Location of Peak associated with the strongest wave form feature
Relative location of Peak associated with the strongest wave form feature
Location of Peak associated with the dicrotic notch
Relative location of Peak associated with the dicrotic notch
Location of Inverted Peak associated with the dicrotic notch
Relative Location of Inverted Peak associated with the dicrotic notch
Magnitude of Peak associated with the strongest wave form feature
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Examiner: Reidel, Jessica L.

Attorney Docket No. 36360/1.13

Date: January 30, 2008

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I, Rick V. Murakami, hereby declare that:

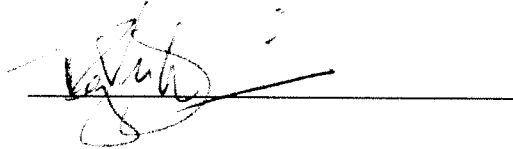
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Respectfully submitted,

**Rick V. Murakami**

A handwritten signature in dark ink, appearing to read 'Rick V. Murakami', is written over a solid horizontal line. The signature is stylized and cursive.

MICHAEL F. KRIEGER  
REGISTERED PATENT ATTORNEY

**KIRTON &  
McCONKIE**  
A PROFESSIONAL CORPORATION  
ATTORNEYS AT LAW  
1800 EAGLE GATE TOWER  
60 EAST SOUTH TEMPLE  
P.O. BOX 43120  
SALT LAKE CITY, UTAH 84145-0120

FAX (801) 321-4893  
TELEPHONE (801) 328-3600  
E-MAIL: mkrieger@kmcclaw.com

Mr. Rick V. Murakami  
Tarian, LLC  
3483 Airport Road  
Ogden, Utah 84405

Re: United States Patent Application for  
METHOD AND APPARATUS FOR NORMALIZATION OF HISTOLOGICAL  
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Also, would you please have Clark provide his residential address and citizenship where indicated on the Declaration and his residential address on the Assignment.

Mr. Rick V. Murakami

Page 2

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As soon as we have received the requested documents from you, we will lodge this application in the Patent Office with the appropriate transmittal documents and government filing fees.

If you have any questions about the enclosed patent application, please let me know.

Cordially,

KIRTON & McCONKIE

Michael F. Krueger

MFK:mlm

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Enclosures: Application  
Drawings  
Declaration, Power of Attorney and Petition  
Assignment  
Declaration Claiming Small Entity Status  
for a Small Business Concern

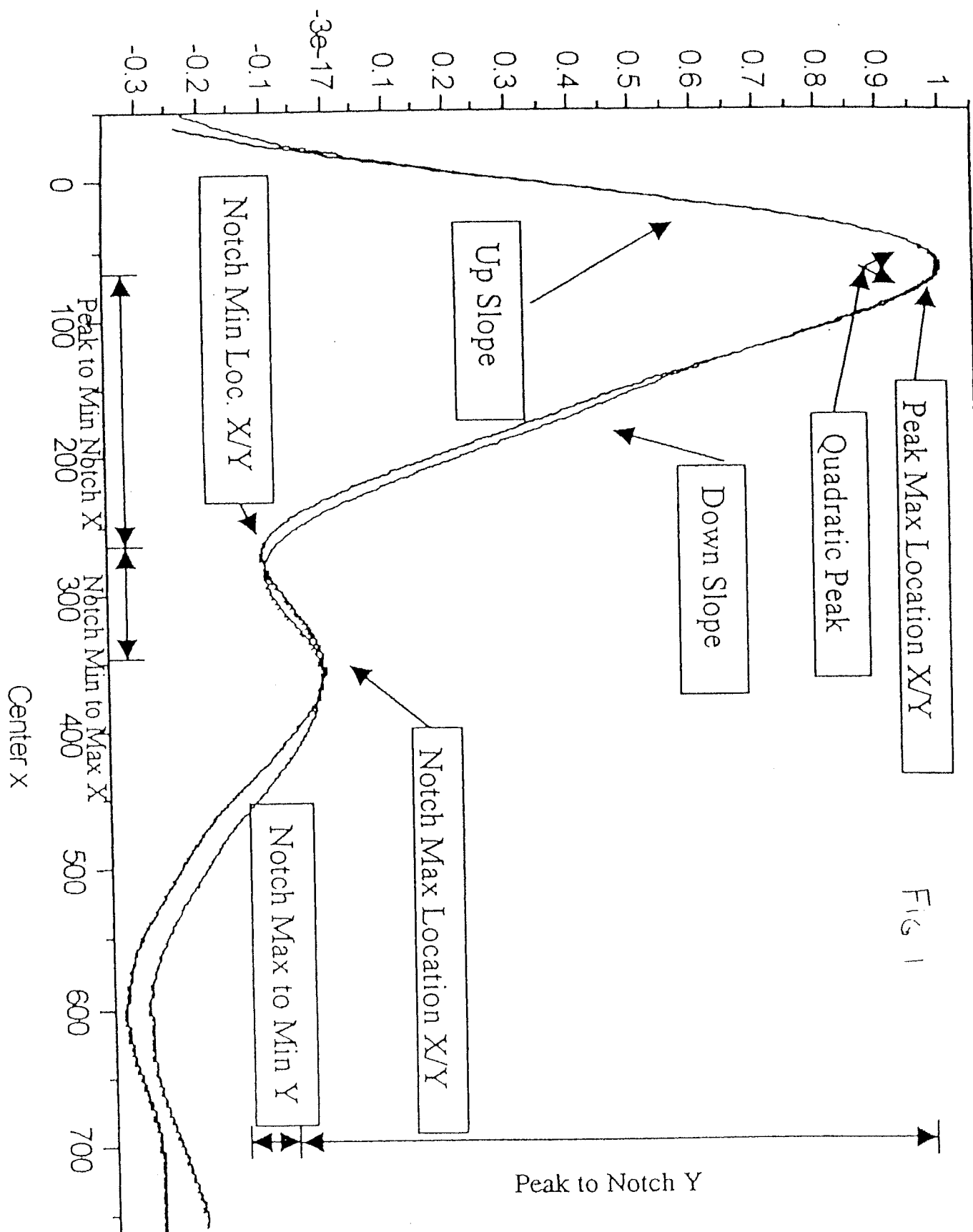


FIG. 1

FIG 2

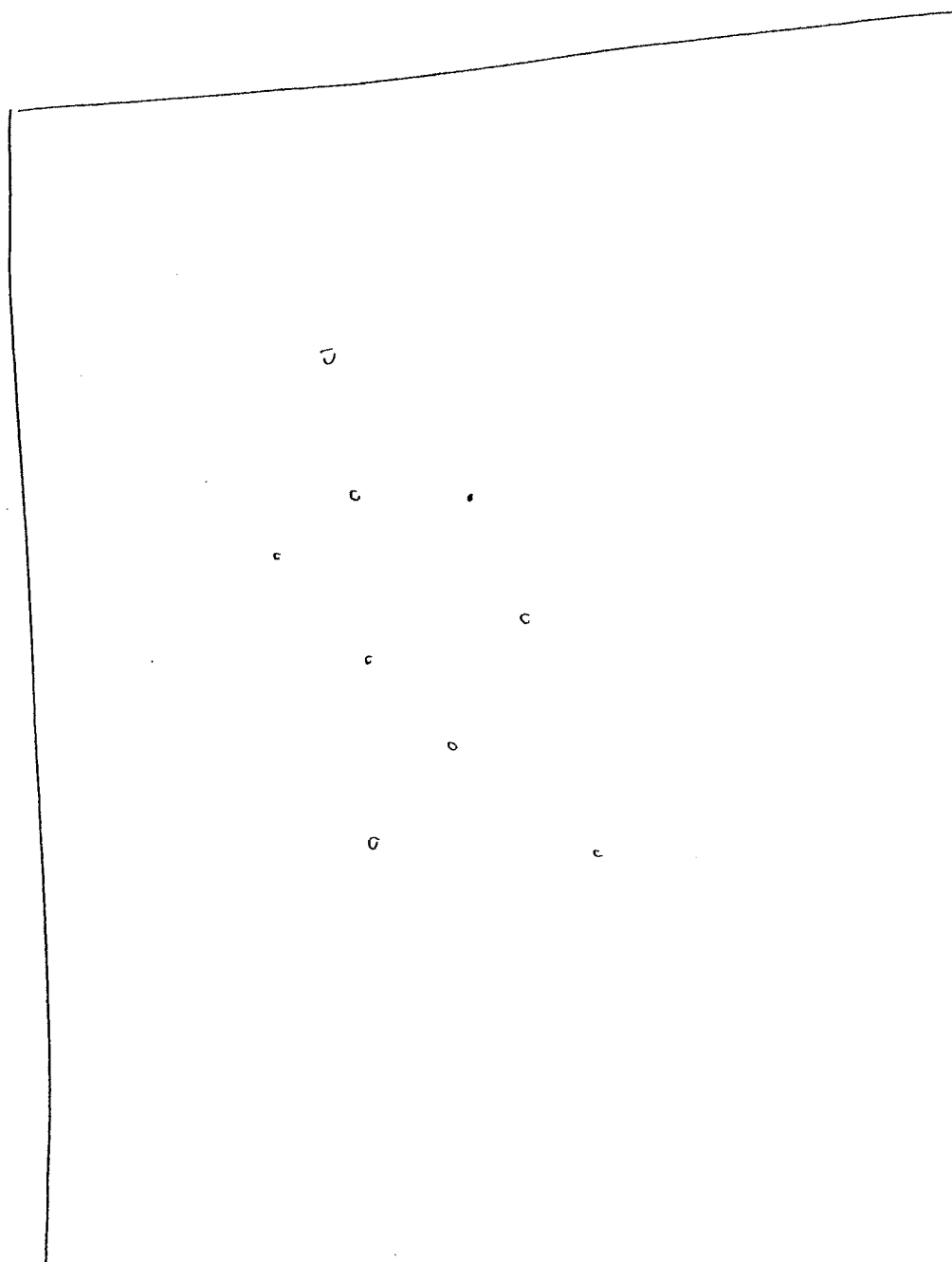


Fig 3

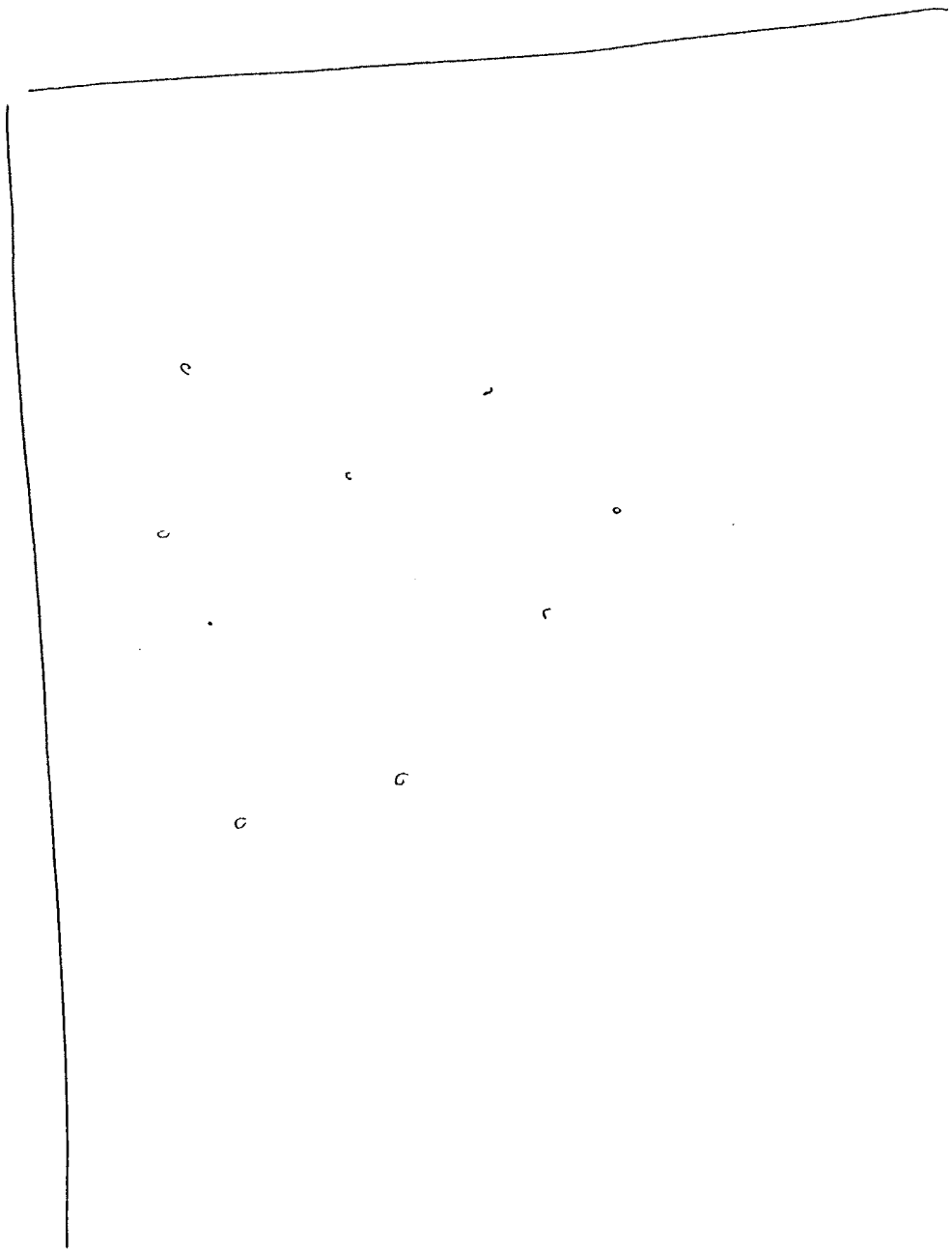


TABLE 1A.

Features of Heartbeat Wave Form
Rate of change (slope) at all locations of the wave form. (There are $n-1$ of these per wave form. $n$ = number of data points)
Shape of Peak associated with the strongest wave form feature
Shape of Peak associated with the dicrotic notch
Shape of Inverted Peak associated with dicrotic notch
Approach angle of Peak associated with the strongest wave form feature
Approach angle of Peak associated with the dicrotic notch
Approach angle of Inverted Peak associated with the strongest wave form feature
Approach angle of Inverted Peak associated with dicrotic notch
Location of Peak associated with the strongest wave form feature
Relative location of Peak associated with the strongest wave form feature
Location of Peak associated with the dicrotic notch
Relative location of Peak associated with the dicrotic notch
Location of Inverted Peak associated with the dicrotic notch
Relative Location of Inverted Peak associated with the dicrotic notch
Magnitude of Peak associated with the strongest wave form feature
Magnitude of Peak associated with the dicrotic notch
Magnitude of Inverted Peak associated with dicrotic notch
Maximum rates of change along any defined segment of the wave form
Minimum rates of change along any defined segment of the wave form
Relative location associated with maximum rates of change along any defined segment of the wave form
Relative location associated with minimum rates of change along any defined segment of the wave form
Magnitude associated with maximum rates of change along a defined segment of the wave form
Magnitude associated with minimum rates of change along any defined segment of the wave form
Frequency of the wave form as determined by any data point



Features of Heartbeat Wave Form
Frequency of wave form as determined by a combination of data points
Trend measures associated with a feature
Trend measures associated with any segment and wave form
Cycles associated with any feature
Cycles associated with any segment of the wave form
Series associated with a feature
Series associated with a segment of the wave form
Variability estimates associated with features
Variability estimates associated with subsegments
Variability estimates associated with defined measures
Linear combination of features, segments, and data on a wave form
Non-linear combinations of features, segments, and data on a wave form

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

**J. Spencer Grant et al.**

Confirmation No. 7395

Application No. 09/815,885

Filed: March 23, 2001

For: **METHOD AND APPARATUS FOR  
CHARACTERIZING AND  
ESTIMATING THE PARAMETERS  
OF HISTOLOGICAL AND  
PHYSIOLOGICAL BIOMETRIC  
MARKERS FOR AUTHENTICATION**

Group Art Unit: 3766

Examiner: Reidel, Jessica L.

Attorney Docket No. 36360/1.13

Date: January 30, 2008

DECLARATION UNDER 37 C.F.R. § 1.131

I, J. Spencer Grant, hereby declare that:

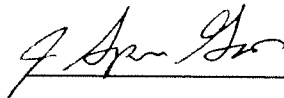
1. I am a named inventor of the above-identified patent application (hereafter "Application"), which was filed on March 23, 2001.
2. I, along with the other named inventors of the Application, conceived and diligently reduced to practice the subject matter of the Application in this country (the United States of America) prior to March 21, 2001.
3. I received a draft of the application and drawings for my review prior to March 21, 2001. A copy of a letter sent by the attorney handling the case, Mr. Michael F. Krieger, is attached as Exhibit 1. As shown in Exhibit 1, Mr. Krieger mailed a draft of the application and associated drawings to Mr. Rick V. Murakami. Mr. Murakami is an inventor of the Application.
4. The letter from Mr. Krieger refers to enclosed drawings. *See* Exhibit 1. I, along with the other named inventors of the Application, developed the referenced drawings

in the United States prior to March 21, 2001. A copy of these drawings is attached as Exhibit 2.

5. I declare that those statements made of my own knowledge are true and that all statements made on information or belief are believed to be true. This declaration is being made knowing that willful false statements and the like are punishable by fine or imprisonment, or both (18 U.S.C. § 1001), and may jeopardize the validity of the application or any patent issuing thereon.

Respectfully submitted,

**J. Spencer Grant**



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MICHAEL F. KRIEGER  
REGISTERED PATENT ATTORNEY

**KIRTON &  
McCONKIE**  
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ATTORNEYS AT LAW  
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TELEPHONE (801) 329-3600  
E-MAIL: mkrieger@kmcclaw.com

Mr. Rick V. Murakami  
Tarian, LLC  
3483 Airport Road  
Ogden, Utah 84405

Re: United States Patent Application for  
METHOD AND APPARATUS FOR NORMALIZATION OF HISTOLOGICAL  
AND PHYSIOLOGICAL BIOMETRIC MARKERS FOR AUTHENTICATION  
Our File: 9437.11

Dear Rick:

Enclosed herewith for your review is the original of the above-entitled patent application including drawings with attached Declaration, Power of Attorney and Petition. An original Assignment in favor of Tarian Technologies is also enclosed.

Please review and have Clark and Matthew review the enclosed application in terms of accuracy, completeness and correct use of terminology. If the application is adequate in its present form, please sign and have Clark and Matthew sign the original Declaration, Power of Attorney and Petition at the back of the application and also the original Assignment and return them to me in the enclosed, self-addressed, stamped envelope for filing with the Patent and Trademark Office.

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Page 2

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If you have any questions about the enclosed patent application, please let me know.

Cordially,

KIRTON & McCONKIE

Michael F. Krieger

MFK:mlm

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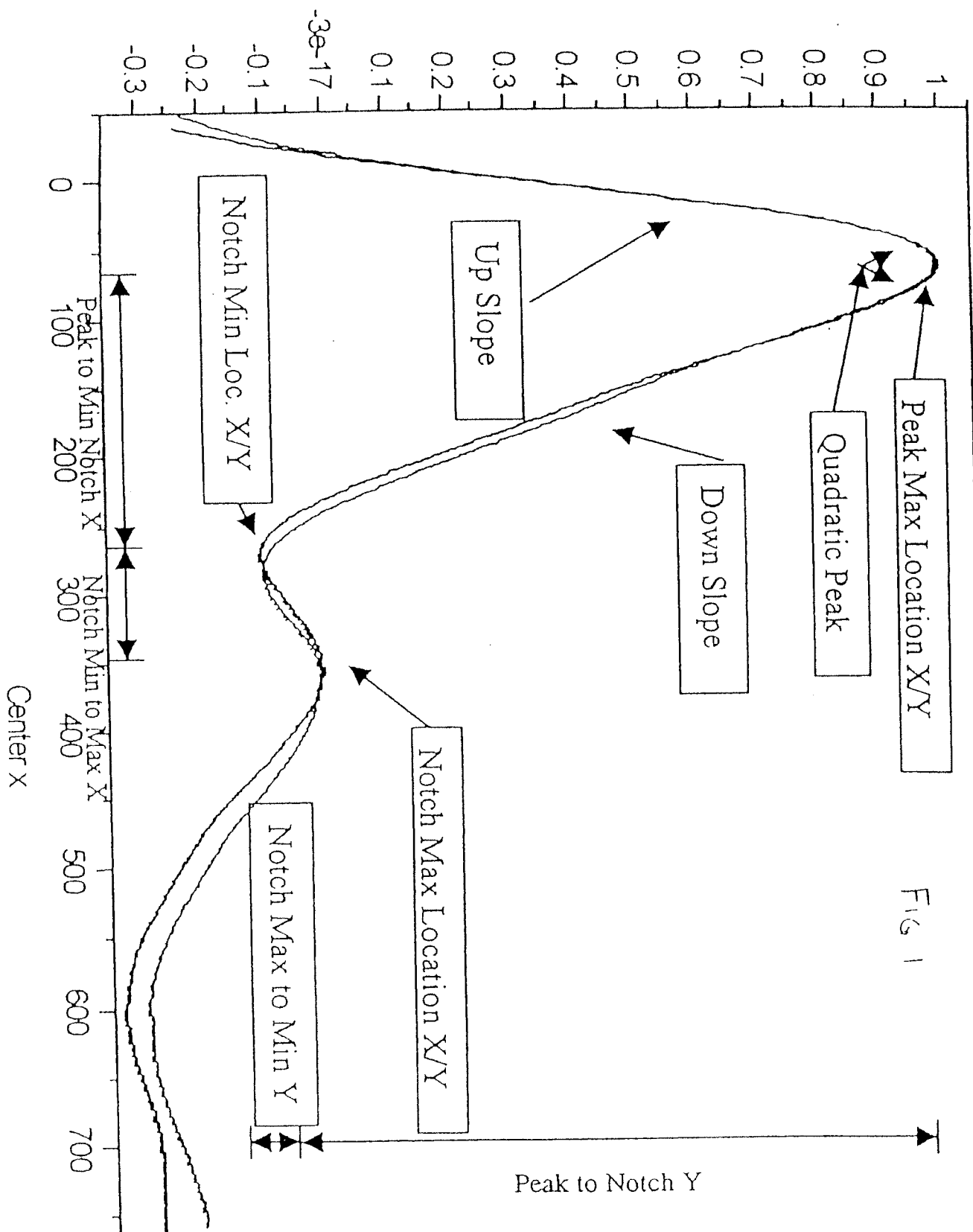


FIG 2

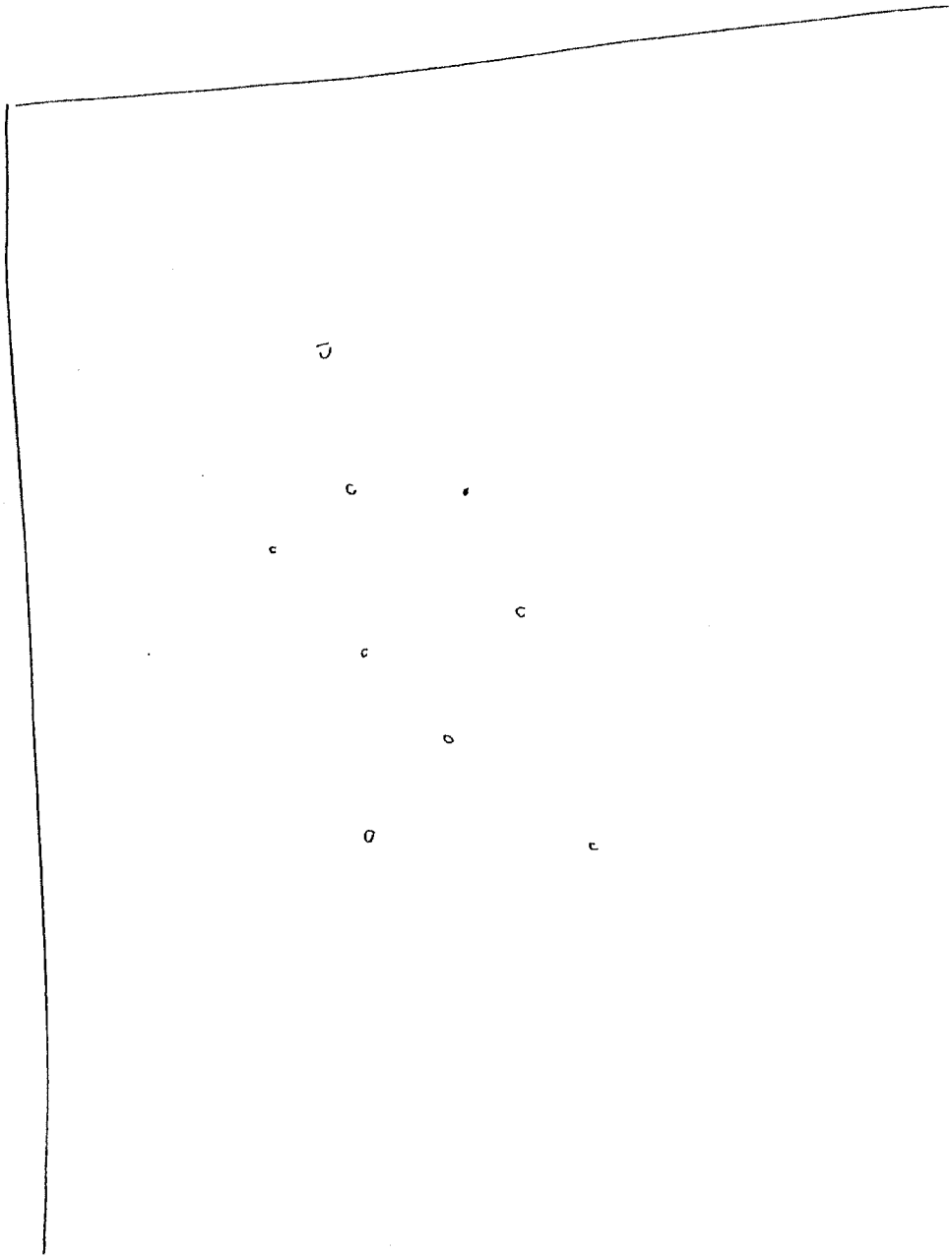


Fig 3

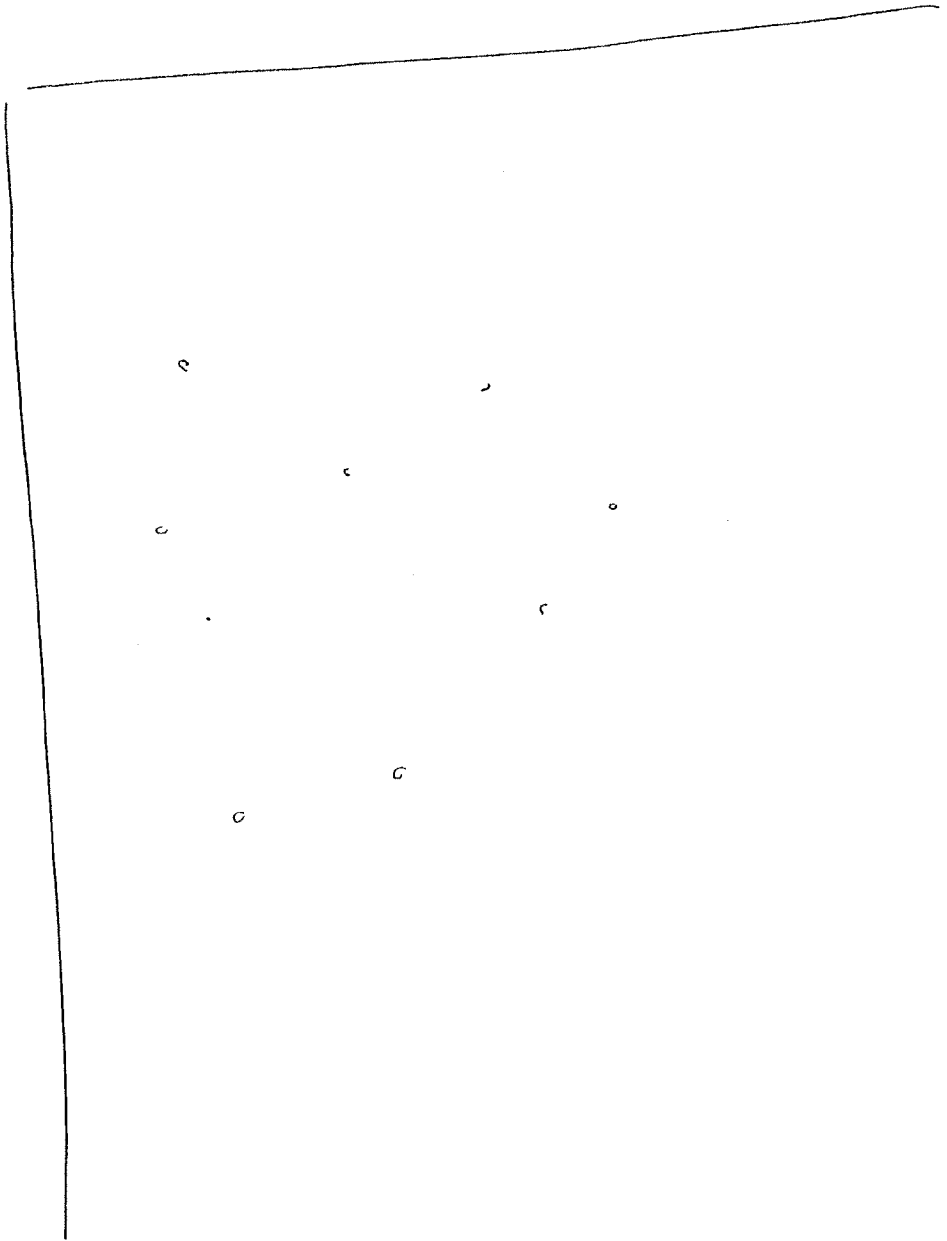




TABLE 14.

Features of Heartbeat Wave Form
Rate of change (slope) at all locations of the wave form. (There are $n-1$ of these per wave form. $n$ = number of data points)
Shape of Peak associated with the strongest wave form feature
Shape of Peak associated with the dicrotic notch
Shape of Inverted Peak associated with dicrotic notch
Approach angle of Peak associated with the strongest wave form feature
Approach angle of Peak associated with the dicrotic notch
Approach angle of Inverted Peak associated with the strongest wave form feature
Approach angle of Inverted Peak associated with dicrotic notch
Location of Peak associated with the strongest wave form feature
Relative location of Peak associated with the strongest wave form feature
Location of Peak associated with the dicrotic notch
Relative location of Peak associated with the dicrotic notch
Location of Inverted Peak associated with the dicrotic notch
Relative Location of Inverted Peak associated with the dicrotic notch
Magnitude of Peak associated with the strongest wave form feature
Magnitude of Peak associated with the dicrotic notch
Magnitude of Inverted Peak associated with dicrotic notch
Maximum rates of change along any defined segment of the wave form
Minimum rates of change along any defined segment of the wave form
Relative location associated with maximum rates of change along any defined segment of the wave form
Relative location associated with minimum rates of change along any defined segment of the wave form
Magnitude associated with maximum rates of change along a defined segment of the wave form
Magnitude associated with minimum rates of change along any defined segment of the wave form
Frequency of the wave form as determined by any data point

Features of Heartbeat Wave Form
Frequency of wave form as determined by a combination of data points
Trend measures associated with a feature
Trend measures associated with any segment and wave form
Cycles associated with any feature
Cycles associated with any segment of the wave form
Series associated with a feature
Series associated with a segment of the wave form
Variability estimates associated with features
Variability estimates associated with subsegments
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Linear combination of features, segments, and data on a wave form
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